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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/071,836	TOYODA ET AL.	
	Examiner	Art Unit	
	Nelson D. Hernández Hernández	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *65-78* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *65,66,71,77 and 78* is/are rejected.

7)☐ Claim(s) *67-70 and 72-76* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 June 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Examiner acknowledges the amended claims filed on January 21, 2009. **Claims 1-64** have been cancelled. **Claims 65-78** have been newly added.

Response to Arguments

2. Applicant's arguments with respect to claims **65, 71, 77 and 78** have been considered but are moot in view of the new grounds of rejection.

3. Applicant's arguments filed January 21, 2009 have been fully considered but they are not persuasive. The Applicant argues the following:

a. In the Ichikawa patent, print information 63B (white balance correction amount, brightness correction amounts, etc.) is recorded on smart media 63. (See, e.g., 63B1-63B5 of Fig. 2 of the Ichikawa patent.) Such print information might be characterized as correction information used when image data is corrected at an external device such as a printer. However, such print information does not include (and cannot be characterized as) correction information ***for preventing at least a part of a process in the correction process under a predetermined condition stored***. Therefore, when correction information (used when image data is corrected at an external device, such as a printer) is selected by a selecting unit of an exemplary embodiment of the present invention, if the above-mentioned "correction information" is inconsistent

with a user's selection, at least part of the correction information is changed. In this way, the correction is not performed based on the selected correction information. On the other hand, since the print information of the Ichikawa patent does not include (and cannot be characterized as) correction information ***for preventing at least a part of a process in the correction process under a predetermined condition***, such information is not stored in the Ichikawa patent. Consequently, in the Ichikawa patent, control obviously cannot be performed based in such non-existent information.

➢ As it will be explained in **claims 65, 71, 77 and 78** of this Office Action, the Examiner understands that the Ichikawa patent still reads on the mentioned above limitations as currently presented. The Examiner would like to pint out that the print information is not being interpreted as correction information ***for preventing at least a part of a process in the correction process under a predetermined condition stored***. The Examiner is interpreting the reflection mark in Ichikawa as the correction information ***for preventing at least a part of a process in the correction process under a predetermined condition stored*** as claimed since the reflection mark is used to determine whether to further process the image data at the external device.

➢ In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., if the above-mentioned "correction information" is inconsistent with a

user's selection, at least part of the correction information is changed) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Objections

4. **Claim 69** is objected to because of the following informalities: In lines 3-8 claim 69 recites "the correction condition set by the second setting unit is one of luminance of scene, subject distance, shutter speed, aperture, strobe, and view angle, and **the** priority is assigned in the order of the luminance of scene, the subject distance, the shutter speed, the aperture, the strobe, and the view angle". The word "**the**" should be written as "**a**". Appropriate correction is required.

5. **Claim 70** is objected to because of the following informalities: In line 12, is the word "that" meant to be "than"? Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 65 and 77 are rejected under 35 U.S.C. 102(e) as being anticipated by Ichikawa, US Patent 6,850,271 B1.

8. **Regarding claim 65**, **Ichikawa** discloses an image capturing device (*See camera 50 as shown in figs. 1 and 3*), comprising:

an image capturing unit (*Fig. 3: 10*) capturing an image of a subject, and outputting an image signal (*Col. 4, lines 13-24; col. 6, lines 62-65*);

an image processing unit (*AE/AWB circuit 12, A/D converter 14, Linear Matrix 16, gamma conversion 18, RGB to YCrCb conversion circuit 20, contour correction 22, YCrCb Matrix 24 and compression circuit 26 as shown in fig. 3*) obtaining image data in a predetermined format based on the image signal output by the image capturing unit (*See col. 4, lines 13-64*);

a setting unit (*See figs. 3: 84 and 5A: 84*) setting an image capturing condition for capturing the image of the subject (*Ichikawa discloses that the camera can be set into automatic mode by setting the dial 84 into automatic mode (represented by letter "A";*

see also fig. 5A: 84C), in which the camera would capture the image data and automatically perform a series of image processing to the captured image data. Ichikawa also discloses that the camera can be set into a manual operation mode by setting the dial 84 into manual mode (represented by letter "M"; see also fig. 5A: 84D), in which the user can control the operation of the image processing as desired. The above mentioned modes would control the image capturing conditions, since the image processing would be performed in accordance with the selected mode. See col. 4, line 57 – col. 5, line 45; col. 7, lines 36-52);

a storing unit (*a storing unit storing a plurality of pieces of first correction information (The Examiner is reading the print information (See fig. 2A: 63B) as the first correction information) and a plurality of pieces of second correction information (The Examiner is reading the reflection mark (See fig. 2A: 63C, which may include the date and time of the processing) as the second correction information) used when a visible image is formed at an external device based on the image data is taught by Ichikawa by teaching that the digital camera may selectively set printer information in the smart media of the digital camera; col. 8, lines 6-9; also the memory 30 is storing photographing information and printer instructions as shown in figs. 2A and 2B*) storing a plurality of pieces (*See fig. 2B: 63B1-63B5*) of first correction information and a plurality of pieces of second correction information used when a visible image is formed at an external device (*printer as shown in fig. 1: 100*) based on the image data (*The Examiner notes that Ichikawa discloses that the printer would process the image data based on the information stored in the image file (Fig. 2A: 63), wherein if the image file*

has a reflection mark (See fig. 2A: 63C) (which the Examiner is reading as the second correction information), which indicates whether image processing has been performed in the camera, if present in the image file, the printer (See fig. 1: 100) would not perform further image quality correction to the image data to avoid redundancy on the image processing. And, on the contrary, if the reflection mark is not present to indicate that a particular image processing has been performed to the image, the printer 100 would perform image processing to the image in accordance with the print information in the memory section 63B. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; see also fig. 6. This teaches using said first and second correction information when a visible image is formed at an external device),

the first correction information (*print information as shown in fig. 2A: 63B*) being correction information for correcting the image data at the external device (*Printer 100 as shown in fig. 1*) based on the image capturing condition set by the setting unit (*in Ichikawa, based on whether the operation modes are in either automatic or manual operation mode, the image capturing condition is changed accordingly. When in automatic mode, the camera would capture and perform image processing automatically and in Manual mode, the user is able to set different parameters that would change the image capturing condition which also represent conditions under which the subject was captured and would result in an automatic addition of the reflection mark that would indicate to the printer that certain image processing has already been performed in the camera so that the printer would not repeat the processing. Therefore, Ichikawa also discloses the automatically selection of a*

predetermined piece of image forming instruction information based on the image capturing condition set by said setting unit, the image capturing condition being the image capturing condition under which the subject was captured as claimed. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; col. 7, lines 36-52; see also fig. 6),

the second correction information (*The Examiner is reading the reflection mark (See fig. 2A: 63C) as the second correction information*) being correction information for preventing at least a part of a correction process based on the first correction information from being performed when the image data is corrected at the external device based on the first correction information (*As explained above, Ichikawa discloses that if the image file has a reflection mark (See fig. 2A: 63C) (which the Examiner is reading as the second correction information), the printer (See fig. 1: 100) would not perform further image quality correction to the image data to avoid redundancy on the image processing. And, on the contrary, if the reflection mark is not present to indicate that a particular image processing has been performed to the image, the printer 100 would perform image processing to the image in accordance with the print information in the memory section 63B. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; see also fig. 6. This teaches that said reflection mark (which is being read as the second correction information) is correction information for preventing at least a part of a correction process based on the first correction information from being performed when the image data is corrected at the external device based on the first correction*

information since the reflections mark is taken in consideration to make the determination of whether processing the image at the printer or not.);

a selecting unit selecting first correction information corresponding to the image capturing condition set by the setting unit (*The Examiner is reading the print information in area 63B as the first correction information corresponding to the image capturing condition set by the setting unit which is set based on the selected mode as explained above)* from among the plurality of pieces of first correction information stored in the storing unit (*as explained above, in Ichikawa, based on whether the operation modes are in either automatic or manual operation mode, the image capturing condition is changed accordingly. When in automatic mode, the camera would capture and perform image processing automatically and the print information is stored in area 63B, and in Manual mode, the user is able to set different parameters that would change the image capturing condition which also represent conditions under which the subject was captured and would result in a selection of the first correction information (print information) to be stored in area 63B and also result in the selection of the second correction information (reflection mark) to be stored in area 63C that would indicate to the printer that certain image processing has already been performed in the camera so that the printer would not repeat the processing. Therefore, Ichikawa also discloses the selecting unit selecting first correction information corresponding to the image capturing condition set by the setting unit. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; col. 7, lines 36-52; see also fig. 6*); and

an outputting unit (*See memory unit 30 as shown in fig. 1 or wireless communication unit 42 (output unit) as shown in fig. 3*) associating the first correction information selected by the selecting unit corresponding to the image capturing condition and the second information corresponding to the first correction information with image data (*Ichikawa discloses that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A and 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9); and also discloses that the printing information can be selected in the camera. This discloses having an outputting unit associating the first correction information selected by the selecting unit corresponding to the image capturing condition and the second information corresponding to the first correction information with image data, since the image data is stored in the image file at memory location 63D in association with the print information (in location 63B) and also associated with the reflection mark (in area 63C) so that when the printer reads the image file, would determine what type of processing would be performed to the image data (either further processing the image if the reflection mark is not present or to avoid further image processing on the processes that were already performed at the camera. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; col. 7, lines 21-52; col. 8, lines 6-9.) (Col. 3, line 66 – col. 4, line 67; col. 5, line 46 – col. 6, line 56; col. 7, lines 21-52; col. 8, lines 6-9*), and outputting the first correction information and the second correction information in association with the image data to the external device (*See image file 63 as shown in fig. 2B, having the image information (63D) stored in*

association with the first correction information (print information in area 63B) and the second correction information (reflection mark in area 63C) to the external device, wherein the data is output using a communication unit (i.e. memory unit 30 as shown in fig. 1 or wireless communication unit 42 (output unit) as shown in fig. 3)).

9. **Regarding claim 77**, claim 77 is a method claim of the apparatus in claim 65. The Ichikawa reference discloses the method as claimed in the apparatus of claim 65.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 66, 71 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa, US Patent 6,850,271 B1 in view of Shiota et al., US Patent 6,011,547.

12. **Regarding claim 66,** the Examiner notes that the apparatus claim 66 uses the term "capable of" throughout when describing the function of portions of the apparatus. Use of such language (i.e. "capable of") is not a positive recitation that such a limitation must occur, but merely that the apparatus must be configured in such a way that the possibility of the limitation occurring is presented. Thus, while the Examiner has specifically addressed the limitations as being obvious/anticipated, should the claims become patentable over the cited art, such a limitation could be viewed as non-limiting as it "suggests or makes optional" the claimed limitations. See MPEP 2106 – C. Therefore, the Examiner suggests amending such limitations to give a positive recitation of their occurrence, such as replacing "capable of" with "which when operable", "operable to" or any other recitation that positively claim the subject matter. Furthermore, it has been held that the recitation that an element is "capable of"

performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

Although Ichikawa discloses that the setting unit setting the image capturing condition comprises a first setting unit selecting one state from a plurality of predetermined shooting states (*In Ichikawa, the image capturing conditions are selected or set based on the selected shooting mode. For example, if the shooting mode is in the manual mode, the user has the opportunity to adjust several parameters and perform certain processes to the image to be captured; if the automatic shooting mode is selected, the camera would automatically select certain parameters and processes to be performed to the image. Therefore, this teaches the limitations "a setting unit setting an image capturing condition for capturing the image of the subject", since said image capturing conditions are set in accordance to the selected shooting mode. See col. 4, line 57 – col. 5, line 45; col. 7, lines 36-52*), and setting a predetermined shooting mode (*Ichikawa discloses that the camera can be set into automatic mode by setting the dial 84 into automatic mode (represented by letter "A"; see also fig. 5A: 84C), in which the camera would capture the image data and automatically perform a series of image processing to the captured image data. Ichikawa also discloses that the camera can be set into a manual operation mode by setting the dial 84 into manual mode (represented by letter "M"; see also fig. 5A: 84D), in which the user can control the operation of the image capturing and processing as desired. The above mentioned modes would control the image capturing conditions as desired by the user, since the image*

processing and the image capturing conditions are selected in accordance with the selected shooting mode. See col. 4, line 57 – col. 5, line 45; col. 7, lines 36-52), Ichikawa does not explicitly disclose said setting unit setting the image capturing condition comprises: a second setting unit capable of setting a predetermined correction condition in accordance with a state of a subject regardless of the shooting mode.

However, **Shiota et al.** discloses an image capturing device (Fig. 1: 1), comprising:

an image capturing unit (*Fig. 1: 4*) capturing an image of a subject, and outputting an image signal (*Col. 3, lines 58-65; col. 4, lines 22-35*);

an image processing unit (*Fig. 1: 5*) obtaining image data in a predetermined format based on the image signal output by the image capturing unit (*Col. 3, lines 57-65; col. 5, lines 22-35*);

a setting unit setting an image capturing condition for capturing the image of the subject (*Shiota et al. discloses that the user may control different conditions of the camera such as whether using or not a flash, focusing conditions, whether the atmosphere is merry or gloomy, and whether the picture has a sharp impression or a soft impression. See col. 4, lines 5-53. This teaches having a setting unit setting an image capturing condition for capturing the image of the subject as claimed.*);

a shooting mode selecting unit selecting a mode for shooting from among a plurality of shooting modes (*Shiota et al. discloses that the user may set the camera into different exposure modes such as automatic or manual, wherein manual mode, the user is able to adjust different parameters to have the image reflecting said user's intentions*

when reproduced. See col. 4, lines 5-54. This teaches having a shooting mode selecting unit selecting a mode for shooting from among a plurality of shooting modes as claimed.);

a setting unit capable of setting a predetermined correction condition in accordance with a state of a subject regardless of the shooting mode (*Shiota et al. discloses that the camera may set information related to the focusing position, user intentions to whether perform further processes for a particular condition in the camera set by the user. See col. 3, line 66 - col. 5, line 67. Since Shiota et al. discloses that the camera can have the focusing position changed or the user intentions set by the user, wherein said conditions are not dependent from a selected shooting mode, Shiota et al. discloses a setting unit capable of setting a predetermined correction condition in accordance with a state of a subject regardless of the shooting mode as claimed.)*

a storing unit (M*emory card of the camera; See col. 5, lines 22-35*) storing image forming instruction information used when a visible image is formed at an external device (*Fig. 1: 3*) based on the image data (*Shiota et al. discloses that the storing unit would store a variety of recording information to digital image data obtained by recording. Wherein said information includes information such as* γ *property presenting a ration of output voltage to an input light amount, focal value and focal length of the lens, content related to the auto exposure (AE) processing being carried out by the camera, information about which of a plurality of processes related to AE have been carried out at the camera, EV value indicating how bright the target object was at the time of photograph, intentions of the user for the photographs (i.e. whether*

the atmosphere is merry or gloomy, and whether the picture has a sharp impression or a soft impression, picture finishing intended by the user (i.e. sun set picture finish, snow finish, skin color emphasizing, monochrome finish, black and white finish, etc.)); and whether the user desires that a particular correction not to be performed. See col. 3, line 66 - col. 5, line 67), the image forming instruction information stored in the storing unit comprising:

first correction information for correcting the image data at the external device based on the image capturing condition set by the setting unit (*As discussed above, Shiota et al. discloses that the storage unit stores different conditions of the camera such as whether using or not a flash, focusing conditions, whether the atmosphere is merry or gloomy, and whether the picture has a sharp impression or a soft impression; and also stores information related to the user intentions of whether desires or not to perform additional processing for a particular condition set by either the user or the camera. Since Shiota et al. discloses that the user may record the intentions for further processing on the external device, the Examiner understands that the user can select whether to perform or not a particular processing based on a correction information that is based on an optical condition set by the setting unit (this suggest for example that if the user desires of does not desire whether to further process the image based on the focusing values stored at the storage unit, the user can indicate the intentions in the storage unit accordingly.). Therefore, Shiota et al discloses first correction information for correcting the image data at the external device based on the image capturing*

condition set by the setting unit wherein the external device 3 would process the received image data in accordance to the instruction in the storage),

second correction information for correcting the image data at the external device based on the shooting mode selected by the shooting mode selecting unit (*As discussed above, Shiota et al. discloses that the storage unit stores information related to the exposure mode or exposure processing performed at the camera; and also stores information related to the user intentions of whether desires or not to perform additional processing for a particular exposure process set by either the user or the camera. Since Shiota et al. discloses that the user may record the intentions for further processing on the external device, the Examiner understands that the user can select whether to perform or not a particular processing based on a correction information that is based on an shooting mode set by the shooting mode setting unit (this suggest for example that if the user desires of does not desire whether to further process the image based on the exposure values or exposure processing performed that is stored at the storage unit, the user can indicate the intentions in the storage unit accordingly.). Therefore, Shiota et al. discloses second correction information for correcting the image data at the external device based on the image shooting mode selected by the shooting mode selecting unit wherein the external device 3 would process the received image data in accordance to the instruction in the storage*), and

third correction information (*the Examiner is reading the intentions of the user to whether or not perform a particular process in the external device as the third correction information*) for preventing at least a part of a correction process on the first correction

information and the second correction information from being performed when the image data is corrected at the external device based on the first correction information and the second correction information (*As discussed above, Shiota et al. discloses that the storage unit stores information related to the user intentions of whether desires or not to perform additional processing for a particular exposure process set by either the user or the camera and/or particular condition set by either the user or the camera. Since Shiota et al. discloses that the user may record the intentions for further processing on the external device, the Examiner understands that the user can select whether to perform or not a particular processing based on a correction information that is based on an shooting mode set by the shooting mode setting unit (this suggest for example that if the user desires of does not desire whether to further process the image based on the exposure values or exposure processing performed that is stored at the storage unit or particular condition set by either the user or the camera that is stored in the storage unit, the user can indicate the intentions in the storage unit accordingly.). Therefore, Shiota et al. discloses third correction information for preventing at least a part of a correction process on the first correction information and the second correction information from being performed when the image data is corrected at the external device based on the first correction information and the second correction information, since the intention of the user can be interpreted as information for preventing at least part of the processes stored in the storage unit*). Shiota et al. also discloses an outputting unit associating the first correction information the second correction information, and the third correction information corresponding to said first correction

information and/or second correction information, with the image data (*the information related to the processes in the camera are stored associated to the image data in the same image file. See col. 5, lines 22-35*), and outputting the first correction information and/or the second correction information; and the third correction information in association with the image data to the external device so that said external device would perform image processing in accordance with the user intentions (*See col. 3, line 66 - col. 5, line 67*). Shiota et al. further teaches that by using the additional information recorded in the file with the image data would allow an optimal image processing condition quickly and simply without repetitive adjustments of the condition by test prints or confirmation of an image using a monitor, so that a high quality print can be promptly provided to a customer, when digital image data obtained by a digital camera are reproduced (*See col. 1, line 64 – col. 2, line 6*).

Therefore, after acknowledging the concept of having a setting a setting unit capable of setting a predetermined correction condition in accordance with a state of a subject regardless of the shooting mode so that the camera can store in a storing unit a plurality of correction information for correcting the image data based on the image capturing condition and the image shooting mode selected in the camera, and also storing information to reflect the user intentions for the image captured so that when reproducing the image data, said image data is processed in accordance to those intentions and the correction information stored in association with the image data as taught in Shiota et al., it would have been obvious to one of an ordinary skill in the art at the time the invention was made to modify the teaching of Ichikawa with the concepts

taught in Shiota et al. to have said setting unit setting the image capturing condition further comprising a setting unit capable of setting a predetermined correction condition in accordance with a state of a subject regardless of the shooting mode so that the camera can store a second correction information for correcting the image data at the external device based on the shooting mode selecting unit to output the image data in association with said first and second information, and the third information to the external device for reproduction, wherein the third information allows to prevent at least a part of a correction process on both the first correction information and the second correction information from being performed when the image data is corrected at the external device based on the first correction information and the second correction information. The motivation to do so would have been to allow an optimal image processing condition quickly and simply without repetitive adjustments of the condition by test prints or confirmation of an image using a monitor, so that a high quality print can be promptly provided to a customer, when digital image data obtained by a digital camera are reproduced as suggested by Shiota et al. (*See col. 1, line 64 – col. 2, line 6*).

13. **Regarding claim 71**, claim 71 is written as a Markush type claim by using the expression "*an outputting unit associating **one of** the first correction information and the second correction information selected by the selecting unit, and the third correction information corresponding to the selected first correction information*", meeting one species of a genus family anticipates the claimed subject matter. "A generic claim

cannot be allowed to an applicant if the prior art discloses a species falling within the claimed genus." The species in that case will anticipate the genus. In re Slayter, 276 F.2d 408, 411, 125 USPQ 345, 347 (CCPA 1960); In re Gosteli, 872 F.2d 1008, 10 USPQ2d 1614 (Fed. Cir. 1989).

Ichikawa discloses an image capturing device (*See camera 50 as shown in figs. 1 and 3*), comprising:

an image capturing unit (*Fig. 3: 10*) capturing an image of a subject, and outputting an image signal (*Col. 4, lines 13-24; col. 6, lines 62-65*);

an image processing unit (*AE/AWB circuit 12, A/D converter 14, Linear Matrix 16, gamma conversion 18, RGB to YCrCb conversion circuit 20, contour correction 22, YCrCb Matrix 24 and compression circuit 26 as shown in fig. 3*) obtaining image data in a predetermined format based on the image signal output by the image capturing unit (*See col. 4, lines 13-64*);

a setting unit setting an image capturing condition for capturing the image of the subject (*In Ichikawa, the image capturing conditions are selected or set based on the selected shooting mode. For example, if the shooting mode is in the manual mode, the user has the opportunity to adjust several parameters and perform certain processes to the image to be captured; if the automatic shooting mode is selected, the camera would automatically select certain parameters and processes to be performed to the image. Therefore, this teaches the limitations "a setting unit setting an image capturing condition for capturing the image of the subject", since said image capturing conditions*

are set in accordance to the selected shooting mode. See col. 4, line 57 – col. 5, line 45; col. 7, lines 36-52);

a shooting mode selecting (*See figs. 3: 84 and 5A: 84*) unit selecting a mode for shooting from among a plurality of shooting modes (*Ichikawa discloses that the camera can be set into automatic mode by setting the dial 84 into automatic mode (represented by letter "A"; see also fig. 5A: 84C), in which the camera would capture the image data and automatically perform a series of image processing to the captured image data. Ichikawa also discloses that the camera can be set into a manual operation mode by setting the dial 84 into manual mode (represented by letter "M"; see also fig. 5A: 84D), in which the user can control the operation of the image capturing and processing as desired. The above mentioned modes would control the image capturing conditions as desired by the user, since the image processing and the image capturing conditions are selected in accordance with the selected shooting mode. See col. 4, line 57 – col. 5, line 45; col. 7, lines 36-52*);

a storing unit (*a storing unit storing a plurality of pieces of first correction information (The Examiner is reading the print information (See fig. 2A: 63B) as the first correction information) and a plurality of pieces of second correction information (The Examiner is reading the reflection mark (See fig. 2A: 63C, which may include the date and time of the processing) as the second correction information) used when a visible image is formed at an external device based on the image data is taught by Ichikawa by teaching that the digital camera may selectively set printer information in the smart media of the digital camera; col. 8, lines 6-9; also the memory 30 is storing*

photographing information and printer instructions as shown in figs. 2A and 2B) storing image forming instruction used when a visible image is formed at an external device (*printer as shown in fig. 1: 100*) based on the image data (*The Examiner notes that Ichikawa discloses that the printer would process the image data based on the information stored in the image file (Fig. 2A: 63), wherein if the image file has a reflection mark (See fig. 2A: 63C) (which the Examiner is reading as the second correction information), which indicates whether image processing has been performed in the camera, if present in the image file, the printer (See fig. 1: 100) would not perform further image quality correction to the image data to avoid redundancy on the image processing. And, on the contrary, if the reflection mark is not present to indicate that a particular image processing has been performed to the image, the printer 100 would perform image processing to the image in accordance with the print information in the memory section 63B. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; see also fig. 6. This teaches using said first and second correction information when a visible image is formed at an external device*), the image forming instruction stored in the storing unit comprising:

a first correction information (*print information as shown in fig. 2A: 63B*) for correcting the image data at the external device (*Printer 100 as shown in fig. 1*) based on the image capturing condition set by the setting unit (*in Ichikawa, based on whether the operation modes are in either automatic or manual operation mode, the image capturing condition is changed accordingly. When in automatic mode, the camera would capture and perform image processing automatically and in Manual mode, the*

user is able to set different parameters that would change the image capturing condition which also represent conditions under which the subject was captured and would result in an automatic addition of the reflection mark that would indicate to the printer that certain image processing has already been performed in the camera so that the printer would not repeat the processing. Therefore, Ichikawa also discloses the automatically selection of a predetermined piece of image forming instruction information based on the image capturing condition set by said setting unit, the image capturing condition being the image capturing condition under which the subject was captured as claimed. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; col. 7, lines 36-52; see also fig. 6),

third correction information (*The Examiner is reading the reflection mark (See fig. 2A: 63C) as the third correction information*) for preventing at least a part of the correction process on the first correction information from being performed when the image data is corrected at the external device based on the first correction information (*As explained above, Ichikawa discloses that if the image file has a reflection mark (See fig. 2A: 63C) (which the Examiner is reading as the second correction information), the printer (See fig. 1: 100) would not perform further image quality correction to the image data to avoid redundancy on the image processing. And, on the contrary, if the reflection mark is not present to indicate that a particular image processing has been performed to the image, the printer 100 would perform image processing to the image in accordance with the print information in the memory section 63B. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; see also fig. 6. This teaches that said*

reflection mark (which is being read as the second correction information) is correction information for preventing at least a part of the correction process on the first correction information from being performed when the image data is corrected at the external device based on the first correction information since the reflections mark is taken in consideration to make the determination of whether processing the image at the printer or not.);

a selecting unit selecting the first correction information stored in the storing unit based on the image capturing condition set by the setting unit (*The Examiner is reading the print information in area 63B as the first correction information corresponding to the image capturing condition set by the setting unit which is set based on the selected mode as explained above)* from among the plurality of pieces of first correction information stored in the storing unit (*as explained above, in Ichikawa, based on whether the operation modes are in either automatic or manual operation mode, the image capturing condition is changed accordingly. When in automatic mode, the camera would capture and perform image processing automatically and the print information is stored in area 63B, and in Manual mode, the user is able to set different parameters that would change the image capturing condition which also represent conditions under which the subject was captured and would result in a selection of the first correction information (print information) to be stored in area 63B and also result in the selection of the second correction information (reflection mark) to be stored in area 63C that would indicate to the printer that certain image processing has already been performed in the camera so that the printer would not repeat the processing. Therefore,*

Ichikawa also discloses the selecting unit selecting first correction information corresponding to the image capturing condition set by the setting unit. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; col. 7, lines 36-52; see also fig. 6); and

an outputting unit (*See memory unit 30 as shown in fig. 1 or wireless communication unit 42 (output unit) as shown in fig. 3*) associating the first correction information selected by the selecting unit, and the third correction information corresponding to the selected first correction information, with the image data (*Ichikawa discloses that the memory unit 30 or wireless communication unit 42 (output unit) associates the printing information based on the photographing information (see figs. 2A and 2B) (col. 3, lines 49-65; col. 4, lines 13-67; col. 6, line 23 – col. 7, line 52; col. 8, lines 6-9); and also discloses that the printing information can be selected in the camera. This discloses having an outputting unit associating the first correction information selected by the selecting unit corresponding to the image capturing condition and the second information corresponding to the first correction information with image data, since the image data is stored in the image file at memory location 63D in association with the print information (in location 63B) and also associated with the reflection mark (in area 63C) so that when the printer reads the image file, would determine what type of processing would be performed to the image data (either further processing the image if the reflection mark is not present or to avoid further image processing on the processes that were already performed at the camera. See col. 3, line 66 - col. 4, line 12; col. 5, line 46 – col. 6, line 56; col. 7, lines 21-52; col. 8, lines 6-*

9.) (Col. 3, line 66 – col. 4, line 67; col. 5, line 46 – col. 6, line 56; col. 7, lines 21-52; col. 8, lines 6-9), and outputting the first correction information, and the third correction information in association with the image data to the external device (*See image file 63 as shown in fig. 2B, having the image information (63D) stored in association with the first correction information (print information in area 63B) and the second correction information (reflection mark in area 63C) to the external device, wherein the data is output using a communication unit (i.e. memory unit 30 as shown in fig. 1 or wireless communication unit 42 (output unit) as shown in fig. 3)*).

Although Ichikawa discloses storing image forming instruction used when a visible image is formed at an external device comprising correction information (interpreted as first correction information) for correcting the image data at the external device based on the image capturing condition set by the setting unit and another correction information (interpreted as the third correction information) for preventing at least a part of the correction process on the correction information from being performed when the image data is corrected at the external device based on the correction information, Ichikawa does not explicitly disclose storing a second correction information (different from the first correction information) for correcting the image data at the external device based on the shooting mode selecting unit and that the third information also allows to prevent at least a part of a correction process on both the first correction information and the second correction information from being performed when the image data is corrected at the external device based on the first correction information and the second correction information.

However, **Shiota et al.** discloses an image capturing device (Fig. 1: 1), comprising:

an image capturing unit (*Fig. 1: 4*) capturing an image of a subject, and outputting an image signal (*Col. 3, lines 58-65; col. 4, lines 22-35*);

an image processing unit (*Fig. 1: 5*) obtaining image data in a predetermined format based on the image signal output by the image capturing unit (*Col. 3, lines 57-65; col. 5, lines 22-35*);

a setting unit setting an image capturing condition for capturing the image of the subject (*Shiota et al. discloses that the user may control different conditions of the camera such as whether using or not a flash, focusing conditions, whether the atmosphere is merry or gloomy, and whether the picture has a sharp impression or a soft impression. See col. 4, lines 5-53. This teaches having a setting unit setting an image capturing condition for capturing the image of the subject as claimed.*);

a shooting mode selecting unit selecting a mode for shooting from among a plurality of shooting modes (*Shiota et al. discloses that the user may set the camera into different exposure modes such as automatic or manual, wherein manual mode, the user is able to adjust different parameters to have the image reflecting said user's intentions when reproduced. See col. 4, lines 5-54. This teaches having a shooting mode selecting unit selecting a mode for shooting from among a plurality of shooting modes as claimed.*);

a storing unit (M*emory card of the camera; See col. 5, lines 22-35*) storing image forming instruction information used when a visible image is formed at an

external device (*Fig. 1: 3*) based on the image data (*Shiota et al. discloses that the storing unit would store a variety of recording information to digital image data obtained by recording. Wherein said information includes information such as γ property presenting a ration of output voltage to an input light amount, focal value and focal length of the lens, content related to the auto exposure (AE) processing being carried out by the camera, information about which of a plurality of processes related to AE have been carried out at the camera, EV value indicating how bright the target object was at the time of photograph, intentions of the user for the photographs (i.e. whether the atmosphere is merry or gloomy, and whether the picture has a sharp impression or a soft impression, picture finishing intended by the user (i.e. sun set picture finish, snow finish, skin color emphasizing, monochrome finish, black and white finish, etc.)); and whether the user desires that a particular correction not to be performed. See col. 3, line 66 - col. 5, line 67*), the image forming instruction information stored in the storing unit comprising:

first correction information for correcting the image data at the external device based on the image capturing condition set by the setting unit (*As discussed above, Shiota et al. discloses that the storage unit stores different conditions of the camera such as whether using or not a flash, focusing conditions, whether the atmosphere is merry or gloomy, and whether the picture has a sharp impression or a soft impression; and also stores information related to the user intentions of whether desires or not to perform additional processing for a particular condition set by either the user or the camera. Since Shiota et al. discloses that the user may record the intentions for further*

processing on the external device, the Examiner understands that the user can select whether to perform or not a particular processing based on a correction information that is based on an optical condition set by the setting unit (this suggest for example that if the user desires of does not desire whether to further process the image based on the focusing values stored at the storage unit, the user can indicate the intentions in the storage unit accordingly.). Therefore, Shiota et al discloses first correction information for correcting the image data at the external device based on the image capturing condition set by the setting unit wherein the external device 3 would process the received image data in accordance to the instruction in the storage),

second correction information for correcting the image data at the external device based on the shooting mode selected by the shooting mode selecting unit (*As discussed above, Shiota et al. discloses that the storage unit stores information related to the exposure mode or exposure processing performed at the camera; and also stores information related to the user intentions of whether desires or not to perform additional processing for a particular exposure process set by either the user or the camera. Since Shiota et al. discloses that the user may record the intentions for further processing on the external device, the Examiner understands that the user can select whether to perform or not a particular processing based on a correction information that is based on an shooting mode set by the shooting mode setting unit (this suggest for example that if the user desires of does not desire whether to further process the image based on the exposure values or exposure processing performed that is stored at the storage unit, the user can indicate the intentions in the storage unit accordingly.).*

Therefore, Shiota et al. discloses second correction information for correcting the image data at the external device based on the image shooting mode selected by the shooting mode selecting unit wherein the external device 3 would process the received image data in accordance to the instruction in the storage), and

third correction information (*the Examiner is reading the intentions of the user to whether or not perform a particular process in the external device as the third correction information*) for preventing at least a part of a correction process on the first correction information and the second correction information from being performed when the image data is corrected at the external device based on the first correction information and the second correction information (*As discussed above, Shiota et al. discloses that the storage unit stores information related to the user intentions of whether desires or not to perform additional processing for a particular exposure process set by either the user or the camera and/or particular condition set by either the user or the camera. Since Shiota et al. discloses that the user may record the intentions for further processing on the external device, the Examiner understands that the user can select whether to perform or not a particular processing based on a correction information that is based on an shooting mode set by the shooting mode setting unit (this suggest for example that if the user desires of does not desire whether to further process the image based on the exposure values or exposure processing performed that is stored at the storage unit or particular condition set by either the user or the camera that is stored in the storage unit, the user can indicate the intentions in the storage unit accordingly.). Therefore, Shiota et al. discloses third correction information for preventing at least a*

part of a correction process on the first correction information and the second correction information from being performed when the image data is corrected at the external device based on the first correction information and the second correction information, since the intention of the user can be interpreted as information for preventing at least part of the processes stored in the storage unit). Shiota et al. also discloses an outputting unit associating the first correction information the second correction information, and the third correction information corresponding to said first correction information and/or second correction information, with the image data (*the information related to the processes in the camera are stored associated to the image data in the same image file. See col. 5, lines 22-35*), and outputting the first correction information and/or the second correction information; and the third correction information in association with the image data to the external device so that said external device would perform image processing in accordance with the user intentions (*See col. 3, line 66 - col. 5, line 67*). Shiota et al. further teaches that by using the additional information recorded in the file with the image data would allow an optimal image processing condition quickly and simply without repetitive adjustments of the condition by test prints or confirmation of an image using a monitor, so that a high quality print can be promptly provided to a customer, when digital image data obtained by a digital camera are reproduced (*See col. 1, line 64 – col. 2, line 6*).

Therefore, after acknowledging the concept of storing a plurality of correction information for correcting the image data based on the image capturing condition and the image shooting mode selected in the camera, and also storing information to reflect

the user intentions for the image captured so that when reproducing the image data, said image data is processed in accordance to those intentions and the correction information stored in association with the image data as taught in Shiota et al., it would have been obvious to one of an ordinary skill in the art at the time the invention was made to modify the teaching of Ichikawa with the concepts taught in Shiota et al. to store a second correction information for correcting the image data at the external device based on the shooting mode selecting unit to output the image data in association with said first and second information, and the third information to the external device for reproduction, wherein the third information allows to prevent at least a part of a correction process on both the first correction information and the second correction information from being performed when the image data is corrected at the external device based on the first correction information and the second correction information. The motivation to do so would have been to allow an optimal image processing condition quickly and simply without repetitive adjustments of the condition by test prints or confirmation of an image using a monitor, so that a high quality print can be promptly provided to a customer, when digital image data obtained by a digital camera are reproduced as suggested by Shiota et al. (*See col. 1, line 64 – col. 2, line 6*).

14. **Regarding claim 78**, claim 78 is a method claim of the apparatus in claim 71. The combined teaching of Ichikawa in view of Shiota et al. teaches the method as claimed in the apparatus of claim 71.

Allowable Subject Matter

15. **Claims 67-70 and 72-76** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter:

17. **Regarding claim 67**, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest that a priority in the plurality of shooting modes is assigned to the respective shooting modes set by the first setting unit, and the shooting mode with a high priority is set when the plurality of shooting modes are set prior to shooting, including all the limitations of claims 65 and 66.

18. **Regarding claim 68**, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest that the shooting mode settable by the first setting unit is one of a scene mode, a filter mode in which sepia or monochrome is settable, a strobe mode, and a view angle mode in which predetermined angle is set, and priority is assigned in the order of the scene mode, the filter mode, the strobe mode, and the view angle mode, including all the limitations of claims 65 and 66.

19. **Regarding claim 69**, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest that the correction condition set by the second setting unit is one of luminance of scene, subject distance, shutter speed, aperture, strobe, and view angle, and a priority is assigned in the order of the luminance of scene, the subject distance, the shutter speed, the aperture, the strobe, and the view angle, including all the limitations of claims 65 and 66.

20. **Regarding claim 70**, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest that the shooting unit setting the image capturing condition comprises: a first setting unit selecting one state from a plurality of predetermined shooting states, and setting a predetermined shooting mode; and a second setting unit capable of setting a predetermined correction condition in accordance with a state of a subject regardless of the shooting mode, and an item set by the first setting unit is prioritized that an item set by the second setting unit, including all the limitations of claim 65.

21. **Regarding claim 72**, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest that a priority is assigned to between the image capturing condition set by the setting unit and the shooting mode selected by the shooting mode selecting unit, and the shooting mode is prioritized when the image capturing condition and the shooting mode are simultaneously set and selected, including all the limitations of claim 71.

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernández Hernández whose telephone number is (571) 272-7311. The examiner can normally be reached on 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lin Ye/
Supervisory Patent Examiner, Art Unit 2622

NDHH
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